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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,493	02/21/2002	Georges Le Noane	P-6462	3222

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EXAMINER

ZARROLI, MICHAEL C

ART UNIT PAPER NUMBER

2839

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/069,493

Applicant(s)

LE NOANE ET AL.

Examiner

Michael C. Zarroli

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
2. The disclosure is objected to because of the following informalities: The Brief Description of the Drawings section is not labeled and is misplaced in the specification. It appears unlabeled on page 12, almost near the end of the specification.

Appropriate correction is required.

Drawings

3. In claim 14, the applicant recites that a “thin film (4)” surrounds at least one fiber. Yet figure 1 shows that reference number 4 is the inside face of the sheath.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 13 is objected to because of the following informalities: This claim should be paragraphed. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 13-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant's use of intersecting axis (x, y?) to locate the fibers in the cavity is confusing. How can the fibers (e.g. figure 1) only occupy one axis? Geometrically speaking, if they occupied one axis, they could only be a straight line. The fibers in the cavity have to have both an x and y axis component. Another thing that is confusing is the recitation that the fibers are "along one axis but that they allow a clearance along the other." Once again (e.g., figure 1), the fibers have to occupy a space that has to have both an x and y component going through the cavity. The examiner believes that

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what the applicant is trying to recite is that the fibers occupy “the greater part” of half the cavity.

Also, in claim 13, the examiner is not sure what the term “continuous accessibility” is meant to limit. From reading the specification the examiner will interpret this term to mean that the fibers can be accessed anywhere along the cable.

Claim 15 recites the limitation "modules" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country, in public use, or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 13-16 and, 18-21 (as best understood) are rejected under 35

U.S.C. 102(b) as being anticipated by Oestreich et al.

Oestreich discloses an optical cable (figures 3 & 4) with continuous accessibility having a closed protective sheath (SH1 or SH2) surrounding a cavity (CA). This cavity has a cross section with perpendicular axis (AP, BP) intersecting at the center of the cavity. **The examiner notes that it is inherent for a cavity to have perpendicular intersecting axis.** Oestreich discloses that this cavity has at least two optical fibers (within BL1) arranged so that they occupy “the greater part” of half the cavity while allowing clearance along the other half (figures 3 & 4).

Regarding claim 14 Oestreich discloses that the fibers are organized into modules (BLN) each one comprising at least one fiber surrounded by a thin film.

Regarding claim 15 Oestreich discloses that the fibers and modules are positioned lengthwise in the cable (fig. 2).

Regarding claim 16 Oestreich discloses that one of the axis is longer than the other (AP longer than BP).

Regarding claims 18 and 19 Oestreich discloses that the cavity has an ovalized shape (fig. 3).

Regarding claims 20 and 21 Oestreich discloses that the sheath has an oval or ovalized shape (fig. 3).

Claim Rejections - 35 USC § 103

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 22 (as best understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over Oestreich et al as applied to claim 13 above, and further in view of admitted art Nagano et al.

Oestreich does not disclose that the longer axis of the sheath coincides with the longer axis of the cavity.

Nagano discloses that a longer axis of a sheath (10) coincides with the longer axis of a cavity (fig. 4).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to reorient the cavity of Oestreich so that the longer axis of the cavity coincides with the longer axis of the sheath as taught by Nagano. The motivation for doing so would have been to make the arrangement of Oestreich flatter and therefore improve “continuous accessibility.”

12. Claims 23 and 31 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Oestreich et al as applied to claim 13 above, and further in view of admitted art Nagano et al.

Oestreich does not disclose a jacket around the sheath or that this jacket has a region of lower thickness.

Nagano discloses a jacket (4) around the sheath (fig. 4) and that this jacket has a region of lower thickness (13).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to provide a jacket with regions of lower thickness around the sheath of Oestreich as taught by Nagano. The motivation for doing so would have been to further protect the sensitive optical fibers and

therefore permit a more rugged use of the invention of Oestreich. Also, the regions of lower thickness could be used to help place or pull the cable from different confined areas.

13. Claim 27 (as best understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over Oestreich et al as applied to claim 13 above, and further in view of Stevens et al.

Oestreich does not disclose that the sheath has a region of lower thickness. Stevens discloses a region of lower thickness in a sheath (fig. 1 top and bottom).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to provide a region of lower thickness in the sheath of Oestreich as taught by Stevens. The motivation for doing so would have been to conserve on manufacturing materials and permit for a flatter arrangement of the cable.

Allowable Subject Matter

14. Claims 17, 24-26 and, 28-30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office

action and to include all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: Each of the dependent claims listed in the paragraph above have only one limitation and therefore those limitations are the allowable matter together with the claims from which they depend.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Houghton teaches a cavity and sheath. Horska teaches a cavity and axis. Griffioen et al teaches a cavity and sheath with fibers filling the greater part of the cavity. Ryoichi teaches a cavity, sheath, and jacket.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Zarroli whose telephone number is 703-305-0608. The examiner can normally be reached on 7:30 to 3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Feild can be reached on (703) 308-2710. The fax phone numbers for the organization where this application or proceeding is

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assigned are 703-872-9318 for regular communications and 703-872-9319 for

After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Michael C. Zarroli
Examiner
Art Unit 2839



MCZ
May 15, 2003